

REMARKS

Claims 1-30 are pending in this application. Applicant gratefully acknowledges that the Office Action indicates that claims 5, 9, 11-14, 18, 20-22, 26, and 28-30 contain allowable subject matter. By this Amendment, allowable claims 5, 9, 11, 18, 20, 21, 26, 28, and 29 are amended into independent form. Also by this Amendment, independent claims 1, 15, and 23 are amended. The amendments introduce no new matter.

Applicant appreciates the courtesies shown to Applicant's representatives by Examiner Behm in the April 19, 2007 personal interview (hereinafter "Interview"). Applicant's separate record of the substance of the Interview is incorporated into the following remarks. Applicant gratefully acknowledges that during the Interview, Examiner Behm indicated that the amendment to independent claims 1, 15, and 23 appears to address the objections to the claims, and render the claims allowable over cited references. Therefore, reconsideration of the application is respectfully requested.

Entry of the amendments is proper under 37 CFR § 1.116 since the amendments: (a) place the application in condition for allowance for the reasons discussed herein; (b) do not raise any new issue requiring further search and/or consideration as the amendments amplify issues previously discussed throughout prosecution; (c) satisfy a requirement of form asserted in the previous Office Action; and (d) place the application in better form for appeal, should an appeal be necessary. The amendments are necessary and were not earlier presented because they are made in response to arguments raised in the final rejection. Entry of the amendments is thus respectfully requested.

I. Formal Matters

The Office Action objects to claim 1 because of informalities. Claim 1 is amended to obviate the objection. Further, the Office Action requests clarification with regard to "a DC power supply." In response, Applicant respectfully clarify that "a DC power supply" as

recited in the preamble of claim 1 corresponds to, for example, a DC power supply B as shown in Figure 1. Accordingly, Applicant respectfully requests the withdrawal of the objection to the claims.

II. Claims Define Patentable Subject Matter

The Office Action (1) rejects claims 1, 15, and 23 under 35 U.S.C. § 102(b) as being anticipated by *Sawtell* (U.S. Patent No. 5,949,225); (2) rejects claim 1 under 35 U.S.C. § 102(b) as being anticipated by De Doncker et al. (U.S. Patent No. 5,373,195; hereinafter *De Doncker*); and (3) rejects claims 1-4, 6-8, 10, 15-17, 19, 23-25, and 27 under 35 U.S.C. § 103(a) as being unpatentable over *De Doncker* in view of *Kerner* (U.S. Patent No. 6,127,793). Applicant respectfully traverses the rejections.

A. Independent claims 1, 15, and 23 are Patentable Over Cited Prior Art

With regard to the rejection of independent claims 1, 15, and 23, Applicant asserts that *Sawtell* does not disclose or suggest a voltage conversion apparatus converting a direct current voltage from a DC power supply into an output voltage such that the output voltage is equal to a designated voltage including at least a control unit controlling a voltage converter based on a detected output voltage and the designated voltage, wherein a transient response property of the voltage converter with respect to the designated voltage in feedback control is consistent with a reference transient response property of the voltage converter when the voltage level of the direct current voltage is equal to a reference voltage at a first time, where the output voltage crosses the designated voltage after a first time period after the first time independent of the output voltage at the first time, as recited in independent claim 1 and similarly recited in independent claims 15 and 23.

In contrast, *Sawtell* discloses an adjustable feedback circuit for adaptive opto drives (*Sawtell*, title). The feedback circuit in *Sawtell* has "an input stage, an output stage having an output voltage, and a feedback element" containing a transmitter coupled to the output stage

and a receiver coupled to the input stage, in which the feedback circuit couples an amplified output from the receiver to the input stage to cause the receiver to operate at a substantially fixed bias operating current (*Sawtell*, Abstract). *Sawtell's* feedback circuit compensates for unwanted variations in an optocoupler's gain, such as those caused by thermal drift or aging (*Sawtell*, col. 3, lines 50-53), by exponentially adjusting a drive signal as a function of the feedback control signal, which causes a phototransistor to "operate at a substantially predetermined bias operating current" (*Sawtell*, col. 4, lines 10-19; col. 7, lines 30-40).

Moreover, *Sawtell* discloses that a current control signal (*Sawtell*, col. 7, line 39, Equation 1) is exponentially related to a differential between a reference voltage (*Sawtell*, col. 7, line 15-6, " V_{ref} ") and a feedback control signal (*Sawtell*, col. 7, lines 13-40), but does not teach or suggest at least a control unit controlling a voltage converter as recited in independent claim 1 and similarly recited in independent claims 15 and 23.

Accordingly, *Sawtell* fails to disclose a voltage conversion apparatus converting a direct current voltage from a DC power supply into an output voltage as recited in independent claim 1 and similarly recited in independent claims 15 and 23.

Next, while *De Doncker* teaches an AC electric drive system that decouples the energy storage system voltage from the DC link voltage (*De Doncker*, Abstract), *De Doncker* similarly does not disclose or suggest a voltage conversion apparatus as recited in independent claim 1. In accordance with the above remarks, Applicant submits that independent claim 1 defines patentable subject matter.

Independent claims 15 and 23, although of different scope, recite features similar to those of claims 1 that define patentable subject matter. Therefore, Applicant submits that independent claims 15 and 23 are also patentable over *Sawtell*.

B. Claims 1-4, 6-8, 10, 15-17, 19, 23-25, and 27 are Patentable Over Cited Prior Art

With respect to claims 1-4, 6-8, 10, 15-17, 19, 23-25, and 27, Applicant assert that *De Doncker* and *Kerner*, taken individually or in combination, fail to disclose or suggest a voltage conversion apparatus converting a direct current voltage from a DC power supply into an output voltage, as recited in independent claim 1 and similarly recited in independent claims 15 and 23.

As noted above, *De Doncker* fails to teach a voltage conversion apparatus as recited in independent claim 1 and similarly recited in independent claims 15 and 23. Next, *Kerner* discloses a method for detecting optimal controller parameters for a digital speed control (*Kerner*, Abstract), but fails to cure the deficiencies of *De Doncker*. Accordingly, a combination of *De Doncker* and *Kerner* would not arrive at the subject matter as recited in independent claim 1 and similarly recited in independent claims 15 and 23.

In accordance with the above remarks, Applicant submits that independent claim 1 defines patentable subject matter. Claims 2-4, 6-8, and 10 depend from claim 1, and therefore, also define patentable subject matter, as well as for the additional features they recite. Independent claims 15 and 23, although of different scope, recite features similar to those of claims 1 that define patentable subject matter. Therefore, Applicant submits that independent claims 15 and 23 are also patentable over *De Doncker* in view of *Kerner*. Claims 16, 17, and 19 depend from claim 15, and claims 24, 25, and 27 depend from claim 23, and therefore, also define patentable subject matter, as well as for the additional features they recite. Thus, Applicant respectfully requests the withdrawal of the § 103(a) rejection of claims 1-4, 6-8, 10, 15-17, 19, 23-25, and 27.

C. Independent claims 5, 9, 11-14, 18, 20-22, 26, and 28-30 are Patentable Over Cited Prior Art

Applicant again gratefully acknowledges that the Office Action indicates that claims 5, 9, 11-14, 18, 20-22, 26, and 28-30 contain allowable subject matter. Allowable claims 5, 9, 11, 18, 20, 21, 26, 28, and 29 are amended into independent form to incorporate the limitations of the claims from which they respectively depend.

III. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration of claims 1-4, 6-8, 10, 15-17, 19, 23-25, and 27 and prompt allowance of claims 1-30 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachment:
Petition for Extension of Time

Date: April 27, 2007

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